

Amendments to the Claims

Please amend the listing of claims as follows:

1. (Currently Amended) Apparatus ~~(1)~~ for producing continuously molded bodies ~~(5)~~ from a molding material, such as a spinning solution containing cellulose, water and tertiary amine oxide, comprising a multitude of extrusion orifices ~~(4)~~ through which during operation the molding material can be extruded into continuously molded bodies ~~(5)~~, a precipitation bath ~~(9)~~ and an air gap ~~(6)~~ arranged between the extrusion orifices ~~(4)~~ and the precipitation bath ~~(9)~~, the continuously molded bodies ~~(5)~~ being passed during operation in successive order through the air gap ~~(6)~~ and the precipitation bath ~~(9)~~, and a gas stream ~~(15)~~ being directed in the area of the air gap ~~(6)~~ to the continuously molded bodies ~~(5)~~, ~~characterized in that~~ wherein the air gap ~~(6)~~ directly after extrusion comprises a shielding zone ~~(20)~~ and a cooling area ~~(19)~~ separated from the extrusion orifices ~~(4)~~ by the shielding zone ~~(20)~~, the cooling area ~~(19)~~ being defined by the gas stream ~~(15)~~ designed as the cooling gas stream ~~(15)~~.

2. (Currently Amended) The apparatus according to claim 1, ~~characterized in that~~ wherein in addition the first shielding zone ~~(20)~~, the air gap ~~(6)~~ comprises a second shielding zone ~~(21)~~ by which the cooling area ~~(19)~~ is separated from the precipitation bath surface ~~(11)~~.

3. (Currently Amended) The apparatus according to claim 1, ~~or 2, characterized in that~~ wherein the width in the direction of passage ~~(7)~~ of the shielding zone ~~(20)~~ is dimensioned such that the shielding zone ~~(20)~~ in the direction of passage ~~(7)~~ extends at least over an expansion zone ~~(24)~~ of the continuously molded bodies ~~(5)~~ which directly follows extrusion and extends in the direction of passage ~~(7)~~.

4. (Currently Amended) The apparatus according to ~~any one of the~~ any one of the ~~mentioned claims, characterized in that~~ claim 1, wherein the extrusion orifices ~~(4)~~ are arranged on a substantially rectangular base are in rows in a direction transverse to the direction ~~(16)~~ of the cooling gas stream ~~(15)~~.

5. (Currently Amended) The apparatus according to claim 4, ~~characterized in that~~wherein the number of the extrusion orifices (4) in row direction is greater than in the cooling gas stream direction (16).

6. (Currently Amended) The apparatus according to ~~any one of the aforementioned claims, characterized in that~~claim 1, wherein the precipitation bath (9) has disposed therein a deflector (10) by which during operation the continuously molded bodies (5) are deflected as a substantially planar curtain (8) to the precipitation bath surface (11), and that outside of the precipitation bath there is provided a bundling means (14) by which during operation the continuously molded bodies (5) are united to form a fiber bundle (13).

7. (Currently Amended) The apparatus according to ~~any one of the aforementioned claims, characterized in that~~claim 1, wherein the width (D) of the cooling gas stream (15) in a direction transverse to the direction of passage (7) of the continuously molded bodies (5) through the air gap (6) is larger than the height (B) of the cooling gas stream in the direction of passage.

8. (Currently Amended) The apparatus according to ~~any one of the aforementioned claims, characterized in that~~claim 1, wherein the cooling gas stream (15) is composed of a plurality of individual cooling gas streams.

9. (Currently Amended) The apparatus according to claim 8, ~~characterized in that~~wherein the individual cooling gas streams are arranged side by side in row direction.

10. (Currently Amended) The apparatus according to ~~any one of the aforementioned claims, characterized in that~~claim 1, wherein the cooling gas stream is designed as a turbulent gas flow in the area where the continuously molded bodies (5) are passed through the air gap (6).

11. (Currently Amended) The apparatus according to ~~any one of the aforementioned claims, characterized in that~~claim 1, wherein the cooling gas stream (15) has a velocity component oriented into the direction of passage (7).

12. (Currently Amended) The apparatus according to ~~any one of the~~
~~aforementioned claims, characterized in that~~claim 1, wherein the inclination (β) of the
cooling gas stream (15) in the direction of passage (7) is greater than the expansion (γ) of the
cooling gas stream (15).

13. (Currently Amended) The apparatus according to ~~any one of the~~
~~aforementioned claims, characterized in that~~claim 1, wherein the molding material prior to its
extrusion has a zero shear viscosity of at least 10000 Pas, ~~preferably at least 15000 Pas,~~ at
85°C.

14. (Currently Amended) The apparatus according to ~~any one of the~~
~~aforementioned claims, characterized in that~~claim 1, wherein the distance of the cooling area
(19) from each extrusion orifice (4) in the direction of passage (7) is at least 10 mm each
time.

15. (Currently Amended) The apparatus according to ~~any one of the~~
~~aforementioned claims, characterized in that~~claim 1, wherein the distance I of the cooling
area (1) in the direction of passage (7) from each extrusion orifice (4) in millimeters satisfies
the following inequality:

$$I > H + A \cdot [\tan(\beta) - 0.14]$$

where H is the distance of the upper edge of the cooling gas stream in the direction of passage
from the plane of the extrusion orifices at the exit from the blowing means (14) in
millimeters, A is the distance in a direction transverse to the direction of passage between the
exit of the cooling gas stream (15) of the blowing means (14) in millimeters and the row (22)
of the continuously molded bodies (5) that is the last one in flow direction (16), in
millimeters, and β is the angle in degrees between the cooling gas stream direction (16) and
the direction transverse to the direction of passage (7).

16. (Currently Amended) The apparatus according to ~~any one of the~~
~~aforementioned claims, characterized in that~~claim 1, wherein the height L of the air gap (6) in
the direction of passage (7) in millimeters satisfies the following inequality:

$$L > I + 0.28 \bullet A + B$$

where I is the distance of the cooling area (19) from the extrusion orifices (4) in the area
where the continuously molded bodies (5) are passed through the air gap (6), A is the
distance in a direction transverse to the direction of passage (7) between the exit of the
cooling gas stream (15) from the blowing means (14) and the row (22) of the continuously
molded bodies (5) that is the last one in flow direction (16), in millimeters, and B is the
height of the cooling gas stream (15) in a direction transverse to the cooling gas stream
direction (16) in the direction of passage (7) at the exit of the cooling gas stream (15) from
the blowing means (14).

17. (Currently Amended) The apparatus according to ~~any one of the~~
~~aforementioned claims, characterized in that~~claim 1, wherein the first shielding zone consists
essentially of air.

18. (Currently Amended) A method for producing continuously molded bodies
(5) from a molding material, such as a spinning solution containing water, cellulose and
tertiary amine oxide, the molding material being first extruded to obtain continuously molded
bodies, the continuously molded bodies being then passed through an air gap (6) and
stretched in said air gap and blown at with a gas stream (15), and the continuously molded
bodies being then guided through a precipitation bath (9), ~~characterized in that~~wherein the
continuously molded bodies (5) in the air gap (6) are first passed through a shielding zone
(20) and then through a cooling area (19), the blowing operation being performed in the
cooling area by means of the gas stream designed as the cooling gas stream.

19. (Currently Amended) The method according to claim 18, ~~characterized in that~~wherein the continuously molded bodies (5) after the cooling area (19) are passed through a second shielding zone (21) before they immerse into the precipitation bath.

20. (Currently Amended) The method according to claim 18, ~~or 19, characterized in that~~wherein the velocity of the cooling gas stream, w_0 , in dependence upon its width B, is set in the direction of passage of the continuously molded bodies by the air gap such that the Reynolds number formed with w_0 and B is at least 2500.

21. (Currently Amended) The method according to ~~any one of claims 18 to 20, characterized in that~~claim 18, wherein the specific blowing power of the cooling gas stream (15) is set to a value of at least 5 mN/mm.